

### REMARKS

Claims 1, 5-13, 15, 16, and 20-27 are pending. Claim 1 has been amended for clarification purposes only. Claim 27 has been added to enhance the scope of patent coverage. The support for claim 27 is found in Figure 5 and elsewhere. It is respectfully submitted that no new matter has been added.

The Patent Office rejected claim 20 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bell, U.S. Patent No. 6,088,348.

For a claim to be anticipated, each and every non-inherent claim limitation must be disclosed in a reference. MPEP 2131.

Claim 20 recites “a CDMA receiver for operating in at least a first mode and a second mode, said CDMA receiver comprising an initial RF stage, said initial RF stage for outputting a received RF signal; an oscillator, said oscillator for generating a plurality of oscillator signals, each at a different frequency, when the receiver operates in the first mode and generating a single oscillator signal when the receiver operates in the second mode; a down-converter coupled to said initial RF stage and said oscillator, said **down-converter for receiving said received RF signal and multiplying said RF signal by said plurality of oscillator signals when the receiver operates in the first mode, and multiplying said RF signal by said single oscillator signal when the receiver operates in the second mode, to generate an intermediate signal;** and a baseband stage, coupled to said down-converter, said baseband stage for processing said intermediate signal.”

Bell, contrary to the Patent Office’s assertions on page 9 of the Office Action dated April 18, 2006, discloses separate down converters 418, 438 for each mode of operation (see FIG. 4). As claim 20 recites a “**down-converter for receiving said received RF signal and multiplying said RF signal by said plurality of oscillator signals when the receiver operates in the first mode, and multiplying said RF signal by said single oscillator signal when the receiver operates in the second mode, to generate an intermediate signal,**” Bell does not disclose or fairly suggest this claimed subject matter. Thus, claim 20 is allowable over Bell.

The Patent Office rejected claims 1, 11-13, and 21 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Luz, U.S. Patent No. 6,088,399.

For a claim to be anticipated, each and every non-inherent claim limitation must be

disclosed in a reference. MPEP 2131.

Claim 1 recites “a method for receiving a signal, said method comprising the steps of **receiving an RF signal, said RF signal comprising a plurality of information channel signals** each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals are transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; **down-converting said RF signal by a down-converter to form an intermediate signal, wherein said intermediate signal comprises down-converted versions formed by the down-converter of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies**, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum; and decoding said intermediate signal to extract data from said down-converted versions of each of said plurality of information channel signals.”

Claim 13 recites “**a mobile radio telephone unit comprising an antenna configured to receive an RF signal, said RF signal comprising a plurality of information channel signals**, each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; **a down-converter operatively coupled to the antenna and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies**, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum; a decoder operatively coupled to the down-converter and configured to decode said intermediate signal to extract data from said down-converted versions of each of said plurality of information channel signals.”

Claim 21 recites “**a base station unit comprising a receiver to receive an RF signal, said RF signal comprising a plurality of information channel signals**, each comprising

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different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and **a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.**"

The Patent Office asserted (page 2, line 15, through page 4, last line) that Luz (col. 1, lines 25-51) discloses "down-converting said RF signal to form an intermediate signal wherein said intermediate signal comprises: down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of the plurality of information channel signals are generated from a plurality of frequencies." Claim 1 has been amended to recite the down-converting is by "a down-converter," similar to the recitations found in claims 13 and 21. Luz, in FIG. 1, shows multiple down-converters 107 that provide signals that are filtered and then summed. Thus, claims 1, 11-13, and 21 are not anticipated or made obvious by Luz.

The Patent Office rejected claims 5, 6, 15, and 16 under 35 U.S.C. 103(a) as being unpatentable over Luz, U.S. Patent No. 6,088,399, as applied to claims 1 and 13, in view of Yokey, U.S. Patent No. 5,499,266.

Yokey does not disclose down-converting a received RF signal and does not remedy the deficiency of Luz. Yokey discloses a down-converter (col. 28, lines 43-61) that reduces that noise of an output frequency and (FIG. 12) a down-conversion of an intermediate frequency in an IF to baseband converter. Thus, claims 5, 6, 15, and 16 are allowable over the prior art of record.

The Patent Office rejected claims 7 and 8 under 35 U.S.C. 103(a) as being unpatentable over Luz, as applied to claim 1, in view of Bell.

Neither Luz or Bell, as discussed above, disclose or fairly suggest "**down-converting said RF signal by a down-converter to form an intermediate signal, wherein said**

**intermediate signal comprises down-converted versions formed by the down-converter of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies.”** Thus, claims 7 and 8 are allowable over the prior art of record.

The Patent Office rejected claims 9 and 10 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Bell, as applied to claim 8, in further view of the Background of the Invention.

Claims 9 and 10 are allowable for the reasons found above.

The Patent Office rejected claim 22 under 35 U.S.C. 103(a) as being unpatentable over Luz, as applied to claim 21 above, and further in view of Yokev.

Claim 22 is allowable for the reasons described above with respect to Luz and Yokev.

The Patent Office rejected claim 23 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Shamlou, U.S. Patent No. 6,690,949.

Claim 23 recites **“a chip apparatus comprising a receiver to receive an RF signal, said RF signal comprising a plurality of information channel signals, each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals is transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.”**

Shamlou discloses cellular communications transceivers employing a common handset capable of receiving a replaceable module containing circuitry optimized for one or more communication standards (col. 3, lines 51-58). Like Luz, however, Shamlou does not appear to disclose or fairly suggest **“a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of**

**information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies.”** Thus, claim 23 is allowable over the prior art of record.

The Patent Office rejected claim 24 under 35 U.S.C. 103(a) as being unpatentable over Luz, in view of Shamlou, as applied to claim 23 above, and further in view of Yokev.

For the reasons described above, none of Luz, Shamlou, or Yokev appear to disclose or fairly suggest **“a down-converter operatively coupled to said receiver and configured to down-convert said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies.”** Thus, claim 24 is allowable over the prior art of record.

The Patent Office rejected claim 25 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Luz.

Claim 25 recites **“an apparatus comprising a means for receiving an RF signal, said RF signal comprising a plurality of information channel signals each comprising different code division multiple access data spread using a different spreading code, wherein each of said plurality of information channel signals are transmitted in one of a plurality of transmission bands, and each of said plurality of information channel signals is carried on one of a plurality of carrier frequencies; and a means for down-converting said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies, said down-converted versions of each of said plurality of information channel signals are within a common frequency spectrum.”**

Luz, in FIG. 1, shows multiple down-converters 107 that provide signals that are filtered and then summed. Thus, claim 25 is allowable over the prior art of record.

The Patent Office rejected claim 26 under 35 U.S.C. 103(a) as being unpatentable over Luz, as applied to claim 25 above, and further in view of Yokev.

Regarding the second to last line of page 13 of the Office Action dated April 18, 2006,

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“As noted above, Luz et al. in combination with Smith et al. discloses all limitations of...” Who is Smith? Applicant believes that the intended reference cited was meant to be Yokev.

As discussed above, neither Luz nor Yokev disclose or fairly suggest **“down-converting said RF signal to form an intermediate signal, wherein said intermediate signal comprises down-converted versions of each of said plurality of information channel signals, and said down-converted versions of each of said plurality of information channel signals are generated from a plurality of frequencies.”** Thus, claim 26 is allowable over the prior art of record.

The Patent Office is respectfully requested to reconsider and remove the rejections of the claims 1-26 under 35 U.S.C. 102(e) or 103(a) based on Luz or Bell, alone or in combination with Shamlou or Yokev, and to allow all of the pending claims 1-27 as now presented for examination. An early notification of the allowability of claims 1-27 is earnestly solicited.

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Respectfully submitted:

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